

DATA SHEET

PRIMERGY RX100 S5

Issue: November 2009

Mono Socket Intel® Xeon® Rack Server (1U) - Low-cost and a small footprint but big in energy efficiency and easy operations

PRIMERGY RX servers offer the perfect solution to downsize data center infrastructure costs efficiently. Basis for it is an IT strategy for more transparency of structure- and administrative expenses as well as maximum use of investments. Our broad portfolio of innovative virtualization, server and solution offerings for TCO reductions of 60% or more provides best prerequisites. Optimized air flow cooling technology assures a long life, highest possible performance/watt as well as by far best in class efficiency -proven by numerous benchmark records. Benefit from our renowned experience in datacenter technology. These allow it, to transfer the availability rates of high end UNIX servers to RX rack servers, PRIMECENTER rack enclosures and infrastructure products. PRIMERGY ServerView Suite with remote management functions provides comprehensive management from anywhere at any time. Our flexible custom supply model and our build-to-order process means that only fully built and pre-tested rack solutions are shipped to the customer. Last but not least Fujitsu Technology Solutions proven commitment to green IT offers clear competitive advantages to our customers.



PRIMERGY RX100 S5

As business processes become more comprehensive and customer bases grow and rely more on Internet technology, data centers face the challenge of rapid enhancing their front-end infrastructure services. Increasingly they are looking for a platform solution that has minimum impact on their budgets, yet is easy to deploy and simple to operate. The RX100 S5 is the optimal answer. With technical further developments, such as Quad-Core Intel® Xeon® CPU in the 3200/3300, integrated SAS or SATA RAID 0, 1 data protection for up to 2x 3.5-inch "easy-change" SATA or 2x 3.5-inch hot-plug SATA/SAS disks and 8 GB memory, the PRIMERGY RX100 S5 matches your business application requirements perfectly. It combines the benefits of cost-optimized SATA or SAS disk technology with a space-saving 1 U form factor of less than 60 cm in depth. This makes it easy to integrate into any rack enclosures. The standard iRMC S2 (Integrated Remote Management Controller) offers enhanced system management based on IPMI 2.0 technology. The set of integrated network and management functions make it a good choice for budget-sensitive infrastructure solutions

MAIN FEATURES	BENEFITS
SATA or SAS RAID 0, 1 controller, Dual Ethernet, integrated Remote Management Controller (iRMC S2) as standard, ServerView Local Service Panel (LSP) opt.	Optimized platform for all data center front-end tasks
Intel® Quad-Core Xeon® 3200/3300 and Dual-Core 3100 series with virtualization technology, Pentium DC or Core2 Duo with very low power consumption	More tasks are handled in less time. More efficient work is possible in your IT sector and less power consumption too. Quad-Core Xeon provides significant performance/watt growth
Integrated SAS or SATA RAID 0, 1; SAS hot-plug / SATA hot-plug or "easy-to-change" hard disks	Easy to use and high-level data security
2 x Gbit/s Ethernet LAN with TCP/IP accelerator plus switchable Service LAN (dedicated or shared)	Top-speed communications link via LAN as standard ensures continuity in failover mode



Technical details

PRIMERGY RX100 S5

Housing type	Rack	Rack
Hard disk architecture	3.5" SATA	3.5" SAS/SATA

Mainboard

Mainboard type	D 2542
Chipset	Intel® 3210
Processor quantity and type	1 x Intel® Core™2 Duo / Intel® Pentium® Dual-Core processor / Intel® Xeon® processor 3000 sequence

Processor

Intel® Xeon® processor X3380 (Turbo: No, 1333 MHz, 95 W)	4C, 3.16 GHz, SLC: 2 x 6 MB, TLC: -
Intel® Xeon® processor X3370 (Turbo: No, 1333 MHz, 95 W)	4C, 3.00 GHz, SLC: 2 x 6 MB, TLC: -
Intel® Xeon® processor X3360 (Turbo: No, 1333 MHz, 95 W)	4C, 2.83 GHz, SLC: 2 x 6 MB, TLC: -
Intel® Xeon® processor X3220 (Turbo: No, 1066 MHz, 95 W)	4C, 2.40 GHz, SLC: 2 x 4 MB, TLC: -
Intel® Xeon® processor L3360	4C, 2.83 GHz, SLC: 2 x 6 MB, 1333 MHz, 65 W)
Intel® Xeon® processor L3110 (Turbo: No, 1333 MHz, 45 W)	2C, 3.00 GHz, SLC: 6 MB, TLC: -
Intel® Xeon® processor E3120 (Turbo: No, 1333 MHz, 65 W)	2C, 3.16 GHz, SLC: 6 MB, TLC: -
Intel® Xeon® processor E3110 (Turbo: No, 1333 MHz, 65 W)	2C, 3.00 GHz, SLC: 6 MB, TLC: -
Intel® Pentium® processor E6300 (Turbo: No, 1066 MHz, 65 W)	2C, 2.80 GHz, SLC: 2 MB, TLC: -
Intel® Pentium® processor E5200 (Turbo: No, 800 MHz, 65 W)	2C, 2.50 GHz, SLC: 2 MB, TLC: -
Intel® Core™2 Duo processor E7600 (Turbo: No, 1066 MHz, 65 W)	2C, 3.06 GHz, SLC: 3 MB, TLC: -
Intel® Core™2 Duo processor E7400 (Turbo: No, 1066 MHz, 65 W)	2C, 2.80 GHz, SLC: 3 MB, TLC: -

Memory slots	4 (2 banks with 2 DIMMs each)
Memory slot type	DIMM (DDR2)
Memory capacity (min. - max.)	1 GB - 8 GB
Memory protection	Advanced ECC
Memory notes	Dual channel support. For dual channel performance, a minimum of 2 memory modules have to be ordered. Capacity per channel has to be the same.

Memory options

4 GB (1 module(s) 4 GB) DDR2, unbuffered, ECC, 800 MHz, PC2-6400
2 GB (1 module(s) 2 GB) DDR2, 800 MHz, PC2-6400
1 GB (1 module(s) 1 GB) DDR2, 800 MHz, PC2-6400

Upgrade notes	A BIOS update can be necessary for a memory and processor upgrade.
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Interfaces

USB ports	5 x (2x front, 2x back, 1x internal)
Graphics (15-pin)	1 x VGA (15-pin)
Serial connection	1 x serial RS-232-C, usable for iRMC or system or shared
Mouse / Keyboard (PS/2)	2
LAN / Ethernet (RJ-45)	2 x Gbit/s Ethernet
Service LAN (RJ45)	1 x dedicated service LAN port for iRMC S2 (10/100 Mbit/s) Service LAN traffic can be switched to shared onboard Gbit LAN port

Onboard or integrated Controller

SATA Controller type notes	SATA (for 1x CD-RW / DVD / DVD-RW)
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Onboard or integrated Controller

LAN Controller	BCM 5715, 2 x 10/100/1000 Mbit/s Ethernet (TCP/IP acceleration), PXE-Boot via LAN from PXE server, iSCSI Boot (also diskless) via onboard LAN	
Remote Management Controller	Integrated Remote Management Controller (iRMC S2, 32 MB attached memory incl. graphics controller), IPMI 2.0 compatible	
Trusted Platform Module (TPM)	Standard, optional deselectable	

Onboard or integrated Controller (Base unit specific)

RAID Controller	2 port SATA with RAID 0/1 for HDD's	4 port for internal SAS HDDs, with RAID 0/1 for Windows and Linux
SATA Controller	2-port SATA 300 with RAID 0, 1	
SATA Controller type notes	for easy change SATA hard disks (hot-plug opt.)	

Slots

PCI-Express x8	2 x low profile (one of these can be used as standard short, 175mm)
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Drive bays

Hard disk bays	2 x
Accessible drive bays	1 x 5.25/0.5-inch for CD-RW/DVD 1 x 3.5/0.5-inch for ServerView Local Service Panel

Drive bays (Base unit specific)

Hard disk bays	2 x 3.5-inch easy change SATA	2 x 3.5-inch hot-plug SAS/SATA
Optional hard disk bays	2 x 3.5-inch hot-plug SATA	-

Operating panel

Operating buttons	On/off switch NMI button
Status LEDs	System status (amber / yellow) Identification (blue) Hard disks access (green) Power (amber / green) At system rear side: System status (amber / yellow) Identification (blue) LAN connection (green) LAN speed (green / yellow)
Service display	Optional: ServerView Local Service Panel (LSP)

BIOS

BIOS features	ROM based setup utility Recovery BIOS BIOS settings save and restore Local BIOS update from USB device Online update tools for main Windows and Linux versions Local and remote update via ServerView Update Manager SMBIOS V2.4 Remote PXE boot support Remote iSCSI boot support
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Supported operating systems

Supported operating systems	Microsoft® Windows Server® 2008 Microsoft® Windows Server® 2003 Novell SUSE Linux Enterprise Server Red Hat Enterprise Linux Note: Support of other Linux derivatives on demand
Operating system release link	http://ts.fujitsu.com/software http://docs.ts.fujitsu.com/dl.aspx?id=a9e600b9-e4cb-4f48-aa41-632f69058421

Server Management

Standard	PDA Prefailure Detection and Analysis ASR&R Automatic Server Recovery and Restart ServerView Suite: SV Installation Manager SV Operation Manager SV RAID Manager SV Update Management SV Power Management SV Agents Online update packages for BIOS, firmware drivers and ServerView Agents ServerView Integration solutions for Microsoft SMS, MOM, SCOM, SCCM and Altiris Deployment Solution ServerView Deployment Manager (fully functional 30-day trial version) ServerView Integration solutions for Microsoft SMS, MOM, SCOM, SCCM and Altiris Deployment Solution ServerView Deployment Manager (fully functional 30-day trial version)
Option	ServerView Integration for Tivoli TEC®, Tivoli NetView, HP NNM and HP Operations Manager iRMC S2 Advanced Pack
Server Management notes	Regarding Operating System dependencies and product details for ServerView Suite Software Products see dedicated Product Data sheets.

Dimensions / Weight

Rack (W x D x H)	430 x 560 x 42.5 mm
Mounting Depth Rack	575 mm
Height Unit Rack	1 U
Mounting Cable depth rack	200 mm cable depth
Weight	up to 12 kg
Weight notes	Weight may vary depending on actual configuration
Rack integration kit	Rack integration kit as option

Floor-stand (W x D x H)

Rack (W x D x H)

Environmental

Noise emission	Measured according to ISO 7779 and declared according to ISO 9296
Sound pressure (LpAm)	34 dB(A) (idle) / 46 dB(A) (operating)
Sound power (LWAd; 1B = 10dB)	4.9 B (idle) / 6.1 B (operating)
Operating ambient temperature	15 - 35°C
Operating relative humidity	10 - 85 % (non condensing)

Electrical values

Power supply configuration	1x standard power supply
Standard power supply output	350 W
Rated voltage range	100 - 127 V / 200 - 240 V
Rated frequency range	50 - 60 Hz
Rated current max.	4 A
Active power max. (per system unit)	177 W
Apparent power max. (per system unit)	183 VA
Heat emission	637.2 kJ/h (604.1 BTU)

Compliance

Germany	GS
Europe	CE
USA/Canada	CSAc/us ULc/us FCC Class A
Global	CB RoHS (Restriction of hazardous substances) WEEE (Waste electrical and electronic equipment)
Japan	VCCI
China	CCC

Compliance

Australia/New Zealand	C-Tick
Taiwan	BSMI
Compliance notes	There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons can be applied for on request.
Compliance link	https://sp.ts.fujitsu.com/sites/certificates/default.aspx

Components

Hard disk drives	SATA, 3 Gb/s, 750 GB, 7200 rpm, non hot pl, 3.5-inch
	SATA, 3 Gb/s, 750 GB, 7200 rpm, hot plug, 3.5-inch
	SATA, 3 Gb/s, 500 GB, 7200 rpm, non hot pl, 3.5-inch
	SATA, 3 Gb/s, 500 GB, 7200 rpm, hot plug, 3.5-inch
	SATA, 3 Gb/s, 250 GB, 7200 rpm, non hot pl, 3.5-inch
	SATA, 3 Gb/s, 250 GB, 7200 rpm, hot plug, 3.5-inch
	SATA, 3 GB/s, 160 GB, 7200 rpm, 3.5-inch
	SATA, 3 Gb/s, 1000 GB, 7200 rpm, non hot pl, 3.5-inch
	SATA, 3 Gb/s, 1000 GB, 7200 rpm, hot plug, 3.5-inch
	SATA, 3 Gb/s, 160 GB, 7200 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s, 450 GB, 15000 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s, 300 GB, 15000 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s, 146 GB, 15000 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s, 73 GB, 15000 rpm, hot plug, 3.5-inch

Hard disk notes	One Gigabyte equals one billion bytes, when referring to hard disk drive capacity. Accessible capacity may vary, also depending on used software No mix of SAS and SATA HDDs possible
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Optical drives	Blu-ray combo drive, (2x BD-ROM; 8x DVD; 24x CD), slimline, SATA I
	DVD Super Multi, (8x DVD/DVD+RW, 6x DVD-RW, 5x DVD-RAM; 24x CD/CD-R, 16x CD-RW), slimline, SATA I

SCSI / SAS Controller	SCSI Ctrl 320 MB 1x int /1x ext
	SAS Ctrl 3 Gb 4 ports int. / 4 ports ext.

LAN Controller	Ethernet Ctrl 1 x 1 Gb Intel® Gigabit CT Desktop Adapter
	Ethernet Ctrl 1 x 1 Gb Intel® PRO/1000 PF Server Adapter
	Ethernet Ctrl 1 x 1 Gb Intel® PRO/1000 PT Server Adapter
	Ethernet Ctrl 2 x 1 Gb Intel® PRO/1000 PT Dual Port Server Adapter
	Ethernet Ctrl 4 x 1 Gb Intel® PRO/1000 PT Quad Port Server Adapter

Rack infrastructure	Cable Arm 1U for PRIMECENTER- and 3rd-party racks
	Rackmount kit full extraction (760mm), tool less mounting
	Rackmount kit partly extraction (524mm), tool less mounting

Warranty

Standard Warranty	1 year
Service level	On-site Service (depending on country)

Maintenance and Support Services - the perfect extension

Recommended Service	7x24, Onsite Response Time: 4h
Spare Parts availability	5 years
Service Weblink	http://ts.fujitsu.com/Supportservice

Information about environmental care, policies, programs and our Environmental Guideline FSC 03230:

<http://ts.fujitsu.com/aboutus>

Take back and Recycling information:

<http://ts.fujitsu.com/recycling>

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